

Claims

1. A system for optimizing HTTP sessions between a plurality of clients and a plurality of servers having:
  - a) a connection management interface device, said device comprising:
    - i) buffer means for storing replies and requests from a plurality of servers and a plurality of clients;
    - ii) software means for managing the connection management interface operation;
    - iii) memory means for storing the software means; and
    - iv) processor means for operating the connection management interface device; and
  - b) connection means for connecting the connection management interface device between a plurality of clients and a plurality of servers.
2. The system of claim 1 wherein the connection management interface device is capable of maintaining a keep-alive connection to a client even where a server has dropped its keep-alive connection with said device.
3. The system of claim 1 wherein the connection management interface device can distribute back-to-back requests over the same connection from one client to a plurality of servers or server processes.
4. The system of claim 1 wherein the connection management interface device fully proxies a web server.

5. The system of claim 1 wherein the buffer means is random access memory.
6. The system of claim 1 wherein the buffer means is flash memory.
7. The system of claim 1 wherein the buffer means is a disk memory.
8. The system of claim 1 wherein the software means includes means for managing the client TCP/IP connection.
9. The system of claim 1 wherein the software means includes means for managing the server TCP/IP connection.
10. The system of claim 1 wherein the software means includes means for rewriting the header of a reply containing dynamic content to include information about the size of said reply.
11. The system of claim 1 wherein the software means includes means for distributing back-to-back requests over the same connection from a client to a plurality of servers or server processes.
12. The system of claim 1 wherein the processor means include means for managing queues within the connection management interface device.

13. The system of claim 1 wherein the processor means include means for managing jobs within the connection management interface device.

14. A method for a connection management interface device connected between a plurality of clients and a plurality of servers in a computer network environment to enable a client to see a keep-alive connection even where the server has dropped the keep-alive connection comprising:

- a) buffering a reply containing dynamic content from a server until the entire reply is received;
- b) determining the length of said reply;
- c) reformatting the header of said reply to include information about the length of said reply; and
- d) sending said reply back to the client.

15. A method for a connection management interface device connected between a plurality of clients and a plurality of servers in a computer network environment to distribute back-to-back requests transmitted over the same connection from one client to a plurality of servers or server processes comprising:

- a) receiving and buffering back-to-back requests made by a client;
- b) noticing stacked requests; and
- c) distributing said requests to a plurality of servers or server processes.

16. An apparatus for optimizing HTTP sessions between a plurality of clients and a plurality of servers comprising:

- a) buffer means for storing replies and requests from a plurality of servers and a plurality of clients;
- b) software means for managing the operation of the apparatus;
- c) memory means for storing the software means;
- d) processor means for operating the connection management interface device; and
- e) connections means for connecting the apparatus between a plurality of clients and a plurality of servers in a computer network environment.

17. The apparatus of claim 14 wherein the buffer means is random access memory.

18. The apparatus of claim 14 wherein the buffer means is flash memory.

19. The apparatus of claim 14 wherein the buffer means is a disk memory.

20. The apparatus of claim 14 wherein the software means includes means for managing the client TCP/IP connection.

21. The apparatus of claim 14 wherein the software means includes means for managing the server TCP/IP connection.

22. The system of claim 1 wherein the processor means include means for managing queues within the connection management interface device.

23. The system of claim 1 wherein the processor means include means for managing jobs within the connection management interface device.

24. The apparatus of claim 14 wherein the connection means includes a TCP/IP connection between the apparatus and a client.

25. The apparatus of claim 14 wherein the connection means includes a TCP/IP connection between the apparatus and a server.